









Using the Open Science Grid

Using grid technology, international collaborations use and share computing and storage resources located close to home and across the globe. Physics simulation and analysis, computer science, astrophysics and biology research groups benefit from, collaborate in and contribute to the Open Science Grid.











Storing and Accessing Data

The needs of data intensive science approach exabytescale storage and petabytescale data buffering. Wide area networks support data transfer rates of tens of gigabits per second. Storage systems provide grid access, management and protection of data.











Services Make the System

Services provide the infrastructure, with middleware as the software, which enables the use and operation of the Open Science Grid. Grid technology is made transparent by inter-operation across different grid infrastructures.











Global Networks Enable Global Global Science

With scientific collaborations spanning the globe, worldwide networks become the backbone of experimental data analysis. Data volumes that would have challenged a local area network five years ago are now moved across and between continents, and advanced applications store and move data across a diverse and ever-changing collection of networks.











Protection and Trust

Secure access and protection for the resources, data and services of the Open Science Grid are pivotal to creating trust between research groups to share and use a common grid infrastructure.











You Can Participate

Open Science Grid Consortium members participate in and contribute to a unique distributed computing infrastructure. Scientists, middleware developers and resource providers collaborate to develop and maintain an open shared computing environment.











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